RX 11

From:	Mike Stein <mike.stein@weaver.com> on behalf of Mike Stein <mike.stein@weaver.com>
Sent:	Monday, November 12, 2018 7:34 PM
To:	Ronald J. Smith <rsmith@AltaMesa.net>
Subject:	Property Accounting Def. Evaluation (DRAFT V.5).docx
Attach:	Property Accounting Def. Evaluation (DRAFT V.5).docx

Ron,

The attached memo has been updated to reflect the appropriate HBP% and the comments have been removed.

Mike

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ALTA MESA

Date: November 10, 2018

Re: Internal Control Evaluation of Oil and Gas Property Accounting

Internal Control Considerations

Step 1: Determine whether a control deficiency exists

Prior to the close of the business combination, management assessed the existing structure and capacity of the various departments within the Accounting function and identified the need to hire additional resources to supplement existing personnel within the property accounting group to ensure the department's resources were aligned with the size and complexity of the Company post business combination. Due to the uncertainty around whether the business combination would close and transaction date, management did not initiate recruiting efforts to acquire the additional resources until after the transaction closed.

Shortly after the business combination was closed, management and Human Resources initiated their recruiting efforts; however, due to inefficiencies in the labor market and management's commitment to adequately vet and hire qualified personnel, management was still in the process of hiring the additional resources deemed necessary to complement the existing property accounting personnel during the first and second quarter of 2018. In order to supplement the team during the company's ongoing recruiting efforts, management engaged various contractors and 3rd party specialists, including two contractors with oil and gas property accounting experience to assist during this period.

During the ramp up period, management hired three full time employees, internally transferred an experienced accountant and engaged 3rd party contractors as resources to help reduce the workload for property accounting personnel. Due to the timing of the transaction and integration of the additional resources, the documentation by the control owners was not sufficient to demonstrate the precision of the control resulting in the following deficiencies related to oil and gas property accounting:

- **Unproved Property Impairment:** For the period January 1, 2018 through June 30, 2018 the process and considerations used to assess unproved property for impairment were not formally documented. In addition, the evaluation of unproved property impartment only included identifying and impairing leases that expired during the current reporting period. While management's considerations were not formally documented, no indicators of impairment (e.g. change in exploration plan or intent to drill, identification of dry holes, etc.) were identified during the first half of the year which would indicate an impairment; therefore, this this deficiency did not result in a direct financial statement impact for the period.

- **Proved Property Impairment:** Through review of the second quarter quantitative proved property impairment analysis, we noted the file was reviewed by supervisory personnel; however, the review was not adequately documented to demonstrate the precision of the review. No errors were identified during the procedures performed and management noted no triggering events occurred (e.g. decrease in price curve, downward revision in reserves, significant changes in legislative or regulatory climate, etc.) during the first half of the year that would indicate proved properties were impaired; therefore, this deficiency did not result in a direct financial statement impact for the period.

- **Depletion Expense:** Through review of the second quarter DD&A Rate Calculation and Depletion Calculation Workbooks, we were unable to obtain adequate documentation to determine whether the review was operating at a level of precision to ensure the accuracy and completeness of the calculation. No errors were identified during the procedures performed; therefore, this deficiency did not result in a direct financial statement impact for the period.

- **Asset Retirement Obligation:** Through review of the ARO Workbook prepared for the second quarter and inquiry with Property Accounting personnel we noted the Property Accounting Supervisor's review of the Credit Adjusted Risk Free Rate was not performed at a level of precision to ensure the rate utilized to compute ARO Liability was appropriate. As the credit adjusted risk free rate used exceeded the actual rate for the first and second quarter, the Company's Asset Retirement Obligation and Asset Retirement Costs were misstated by approximately $33,500 and $65,000, respectively. Due the size of the misstatement, the impact on depletion and accretion expense was immaterial.

- **Salt Water Disposal Wells:** During the first quarter, management decided to reclassify the salt water disposal system from oil and gas properties to property, plant and equipment. The property accountant reclassified the costs associated with the salt water disposal wells; however, did not transfer approximately $34 million of capitalized costs associated with the system and pipelines which remained in oil and gas properties. The control failure resulted in an overstatement of depletion expense for the first and second quarters of approximately $750,000 and $850,000, respectively.

Step 2: Identify the Deficient Control and Root Cause Analysis

Management evaluated the facts and circumstances described above and determined the control owners who performed the following control activities, during the second quarter, did not adequately document the review performed to sufficiency demonstrate the control was operating at a level of precision necessary to achieve the intended control objective.

- **IMP – 03 (Review of Unproved Property Impairment):** The Manager–Asset Management reviews the quantitative Unproved Property Impairment analysis performed for significant properties to ensure unproved property balances are not overstated. The review of the quantitative assessment (i.e. DCF Model) includes: 1) agreeing the book values used in the analysis to BOLO Trial Balance; 2) agreeing the undiscounted future net revenues associated with the risk adjusted probable and possible reserves per the NYMEX reserve report; and 3) verifying mathematical accuracy of the calculation.

- **IMP – 06 (Review of Proved Property Impairment):** The Manager–Asset Management reviews the Proved Property Impairment Analysis to ensure the accuracy and completeness of the Proved Property Impairment Workbook. The review includes: 1) ensuring all assets with an identified triggering event are included; 2) agreeing net book values used in the analysis to BOLO Trial Balance; 3) agreeing the undiscounted future net revenue to the NYMEX reserve report; and 4) verifying mathematical accuracy of the embedded logic used in the assessment.

- **DDA – 02 (Review of Depletion Rate Calculation):** The Manager-Asset Management reviews the quarter-end unit-of-production (UOP) depletion rate calculation to ensure the accuracy and completeness of the calculation. The review includes the following: 1) agreeing production volumes per the DD&A calculation to the volumes on the BOLO YTD Production Query; 2) agreeing the reserve detail per the DD&A calculation to the approved online report; and 3) verifying the mathematical accuracy of UOP rate calculations.

- **DDA – 03: (Review of Depletion True-up Calculation):** The Manager-Asset Management reviews the quarter-end depletion true-up calculation to ensure the accuracy and completeness of the calculation. The review includes the following: 1) agreeing the unamortized costs at the end of the period per the workbook to the BOLO Trial Balance; 2) verifying the current period activity (e.g. adds, dispositions, etc.) per the workbook agree to the BOLO Account Activity Reports; 3) ensuring the UOP rates used in the calculation agree to the DD&A calculation; and 4) verifying the mathematical accuracy of the depletion calculations.

- **ARO – 08 (Credit Adjusted Risk Free Rate):** Quarterly, the Manager - Asset Management and/or Controller - Financial review the credit adjusted risk free rate to ensure the rate is reasonable and each component used to compute the rate agrees to supporting documentation.

- **OGP – 05 (WIP Reclassification Review):** Quarterly, the Manager - Asset Management reviews the WIP Summary Schedule summarizing all projects in WIP and the results of the operational review and ensures all projects determined to be complete have been updated with appropriate reclass code within BOLO.

Management performed an analysis to evaluate the root cause of the property accounting related deficiencies identified in the second quarter and determined the deficiencies were related to the timing of the transaction and the recruitment, selection and integration of additional personnel hired during the ramp period to ensure the resources within the property accounting department were appropriate.

Step 3: Is the Control Deficiency indicative of other Control Deficiencies:

Based on the considerations outlined below, management does not deem the control deficiencies identified herein to be indicative of other deficiencies outside of property accounting and the underlying issue or root cause is not pervasive throughout the entire organization. Specifically, management has demonstrated an effective risk assessment process designed to anticipate the impact of significant events on the company's control environment and its commitment to attract, develop and retain competent individuals.

We considered whether the deficiencies were indicative of a broader issue, such as of lack of effective risk assessment process or lack of commitment to attract, develop and retain competent individuals and noted management performed an assessment of its employees prior to the business combination. As part of the assessment, management evaluated the competencies and capacity of each department, including property accounting, and identified the need to hire additional resources to ensure staffing was adequate to address the complexity, structure and reporting requirements of the combined company. Shortly after the transaction closed, management began recruiting qualified individuals to supplement the existing personnel and allow the company to scale. Management's assessment of the capacity and competency of the accounting department prior to the business combination demonstrate management has established a formal process for identifying and assessing changes that could significantly impact the system of internal control.

Management began recruiting additional resources shortly after the transaction closed and prior to submission of the second quarter Form 10-Q, management had hired three additional full time property accountants, transferred one experienced accountant from internal financial reporting and engaged two 3rd party contractors to supplement the property accounting department. Three of the individuals hired are CPAs licensed in the state of Texas and have between three and twenty-five years of relevant industry experience. In addition, management hired a Director of Technical Accounting with 25 years of experience to create an additional layer of oversight. Based on management's recruiting and hiring activities performed post business combination through the second quarter filing deadline, we believe management demonstrated the commitment to attract, develop and retain competent individuals. In addition, we noted management has continued to monitor the staffing levels and converted one of the consultants to a full time employee as recently as October.

In addition, we considered whether the deficiency was indicative of a lack of appropriate U.S. GAAP knowledge of the property accounting personnel in-place during the first and second quarters. Management evaluated the technical skills and competency of the legacy property accounting team and noted each individual within the department was qualified for the position and two of the three individuals were CPAs licensed in the state of Texas. Prior to the business combination the Alta Mesa Holdings, LP had never restated previously issued financial statements, disclosed a material weakness in internal control over financial reporting, and did not have a history of audit adjustments related to property accounting. Therefore, management considers the legacy property accounting personnel to have adequate knowledge of US GAAP and the fundamentals of oil and gas accounting to ensure that activity related to property accounting was appropriately reported for the first two quarters.

In addition, we noted that during the period, the property accounting team and management collaborated to refine existing policies and procedures to address new risks and considerations identified post business combination. Further, these individuals have revised and enhanced the legacy property accounting controls to ensure they are adequately designed, operating effectively and are documented in a manner consistent with the risk of control failure. Internal audit has performed procedures to assess the operating effectiveness of property accounting controls for the 3rd quarter and has not identified any further deficiencies.

Step 4: Evaluate the Severity of the Deficiency:

In order to evaluate the severity of the deficiencies identified, management utilized the criteria established in Audit Standard 2201 – An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements. Management considered the following guidance included in AS 2201.63: (1) Whether there is a reasonable possibility the company's controls will fail to prevent or detect a misstatement of an account balance or disclosure; and (2) The magnitude of the potential misstatement resulting from the deficiency or deficiencies.

- **Unproved Property:** Management considers the Anadarko Basin in Oklahoma or the STACK its primary strategic play and virtually all of the Alta Mesa Holdings, LP's operations and capital expenditure budget of between $550 - $580 million is allocated to the development of the play and expanding its acreage position in Kingfisher and Major Counties. The Company has a highly contiguous leasehold position in Kingfisher and Major Counties with approximately 130,000 net acres of which the majority or approximately 77% is classified as held by production. The significant percentage of leases held by production, reduce the likelihood the carrying value of unproved properties will be overstated.

  Management has established a formal drilling plan for the year that anticipates drilling between 170 – 180 wells during the current fiscal year and has completed 155 wells to date demonstrating management's continued commitment to the resource play. In addition, management notes that virtually all of the Company's capital expenditure budget for the year has been allocated to exploration and development activity in the STACK. In addition, management notes that the Company has access to capital and the liquidity necessary to execute its drilling program and/or retained expiring leases.

  In connection with the Business Combination executed February 9, 2018 management engaged a 3rd party specialist to determine the fair value of the Company's unproved properties. As part of the analysis, management and the 3rd party specialist determined the fair value of the unproved properties based on the value of the Company's unproved reserves (i.e. probable, possible, and contingent reserves). The valuation of the Company's unproved property was heavily scrutinized by management during the business combination; therefore, management believes the carrying value on the opening balance sheet to closely approximates the fair value of unproved properties acquired prior to the business combination.

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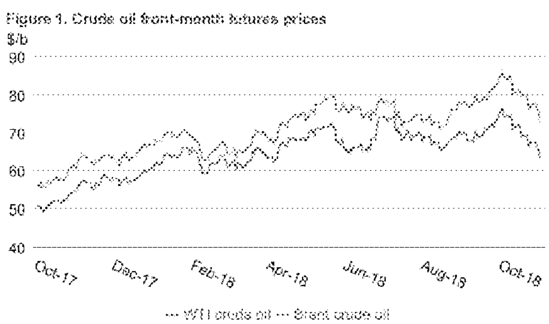
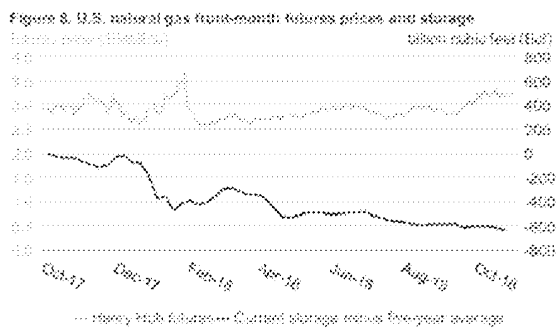
As previously mentioned, the Company's primary strategic focus in on the STACK resource play and management has continued to acquire additional leases post-acquisition. Between February 9, 2018 and June 30, 2018 the Company has acquired approximately $30 million of additional undeveloped leasehold costs through September 30, 2018. Leasehold costs acquired post business combination represent approximately 3.5% of the Company's $866 million of unproved property balance reported unproved property balances for the first and second quarters, respectively.

In order to determine whether the control deficiency could have resulted in a misstatement to the first or second quarter, management evaluated whether any indicators of unproved property impairment for each period. Indicators of unproved property impairment typically include, but are not be limited to, to the following: 1) significant changes in drilling plans; 2) identification of dry holes or under performing well tests; 3) downward revisions in the value of unproved reserves; 4) significant declines in oil or natural gas prices; etc.

During the first two quarters, management noted there was a positive trend in the oil and natural gas price curves (See illustration below – US Energy Information Administration), unproved reserves increased from 378,867 net Mboe as of March 31, 2018 to 382,654 net Mboe as of June 30, 2018, and there was not a significant change in operating costs as lease operating costs per BOE decreased from $6.66 during the first quarter to $5.86 during the second quarter.





As the fair value of the company's undeveloped leasehold cost was determined by independent 3rd party specialists and reviewed by management in February of 2018 in connection with the business combination, the concentration of the company's undeveloped leasehold cost within the STACK resource play, management's continued exploration and drilling activity during the first quarter, management does not believe it is reasonably possible undeveloped leasehold costs were impaired during the period ended March 31, 2018.

During the second quarter, management continued to execute its drilling and development program and drilled 47 wells during the period. Based on reviewing the well results and geologic assessments, management affirmed its commitment to develop the STACK and increased the rig count from six rigs as of the date of business combination to eight rigs during the second quarter. In addition, management signed a letter agreement with a private E&P company, related to 17,000 acreage in Major County that is contiguous with Alta Mesa's existing acreage.

Based on management's continued exploration and drilling during the second quarter, decision to increase rig count based on the results of drilling, and increase in price curve during the period management determined there were no indicators of impairment present during the second quarter; therefore, it is not reasonably possible undeveloped leasehold costs were impaired during the second quarter.

- **Proved Property Impairment:** While the review of the proved property impairment analysis for the second quarter was not sufficiency documented to demonstrate the precision of the control, management noted the impairment analysis was performed, reviewed and a substantial cushion (i.e. ~ $1.2 billion) existed as of the end of the second quarter. Further, no errors were identified through control testing. The quantitative assessment of proved property impairment is not considered a complex calculation and does not require judgement by the individual responsible for performing the calculation; however, requires the net book value and undiscounted cash flow detail to be accurately input into the analysis.

  In connection with the Business Combination management engaged a 3rd party valuation specialist to determine the fair value of the Company's proved properties. The value of the proved properties was determined by the 3rd party specialist based on assumptions provided by Reservoir Engineering which were reviewed by management. The review of the fair value for proved properties was heavily scrutinized by management during the business combination. The fair value of proved property, computed by the 3rd party specialist, was used to create the Company's opening balance sheet dated February 9, 2018.

  In order to determine whether the control deficiency could have resulted in a misstatement to the period ended March 31, 2018, management evaluated whether any indicators of proved property occurred during the quarter. Indicators of proved property impairment typically include, but are not be limited to, to the following: 1) significant changes in drilling plans; 2) downward revisions in the value of proved reserves; 3) significant declines in oil or natural gas prices; 4) significant increases in operational costs, etc.

  Management evaluated whether any indicators of impairment were present during the first and/or second quarters and noted the following: there was positive trend in the oil and natural gas price curve (See illustration above), proved reserves increased from 180,736 net Moe as or March 31, 2018 to 190,002 net Mboe as of June 30, 2018, and there was not a significant change in operating costs as lease operating costs per BOE decreased from $6.66 during the first quarter to $5.86 during the second quarter.

  Due to the timing of the valuation, active drilling program, and rising or flat commodity pricing environment management does not believe it is reasonably possible that a proved property impairment occurred from the date of the business combination through the end of the second quarter.

- **Credit Adjusted Risk Free Rate:** Based on review of the facts and circumstances related to the deficiency, management determined the control was inadequately designed to ensure the credit adjusted risk free rate used to complete the present value of the Company's ARO obligation was appropriate. As such, management considers it reasonably possible the control could fail to prevent or detect a misstatement of an account balance or disclosure.

  Management performed a quantitative sensitivity analysis and computed the impact of a 4% decrease in the Credit-Adjusted Risk Free Rate noting the decrease would result in a $5.5M increase in the present value of ARO liability. As the addition to the ARO liability would be offset by a corresponding ARO asset; therefore, the impact of a potential error would be a balance sheet gross-up. In addition, management computed the estimated impact on accretion expense for the first two quarters, and determined the potential misstatement would be less than $20,000 which is considered trivial. Based on the value of the Asset Retirement Obligation account balance as of the end of the second quarter (i.e. ~ $7 million) and impact a potential error would have on the interim and/or annual financial statements, management does not believe the deficiency would result in a material misstatement.

- **Depletion Expense:** While the review of the depletion rate and true-up calculations was not adequately documented to demonstrate the control was operating at a sufficient level of precision, the depletion calculation for the first and second quarters were reviewed by management and no errors were identified during the review; therefore, no direct financial statement impact was identified as a result of the deficiency.

  Upon closing of the business combination and evaluation of the company on a go-forward basis, management reassessed the depletable units and determined that aggregation of fields is more appropriate based on the geological and geophysical make-up of the reserves. As part of evaluating the depletion methodology, management performed a sensitivity analysis to evaluate the impact of computing the depletion rate on a one, three or eleven field basis and concluded the impact on the depletion expense was not material. In addition, management evaluated the impact related to the change in accounting estimate and finalization of the methodology used to allocate the fair value of proved property and noted the year to date impact was approximately $3.2 million. Management recorded the depletion true-up during the 3rd quarter and evaluated the impact associated the adjustment, noting depletion for the first and second quarter were not materially misstated.

  In addition to the quantitative considerations above, management notes depletion expense is a non-cash transaction which is added back to EBITDA and EBITDAX and does not have an impact on working capital which are the metrics used by investors to evaluate E&P Company performance.

  Based on the value of the sensitivity and look-back analysis performed during the third quarter and impact associated with the year to date depletion true-up entry, management has determined the potential magnitude of the deficiency is not material to the financial statements

- **Salt Water Disposal System:** Management identified the inappropriately classified salt water disposal system costs while performing an analysis to ensure any costs within proved properties associated with the Company's fresh water system were appropriately identified and reclassified upon completion of the system. While performing the analysis of the approximately $70 million in capitalized "water system" costs previously capitalized within oil and gas properties, property accounting personnel identified $34 million of the cost was associated with the salt water disposal system and should have been reclassified during the first quarter. Management identified the issue and reclassified the costs from proved property during the 3rd quarter; therefore, no misstatement is reflected on the Company's 3rd quarter Form 10-Q.

  However, the control deficiency resulted in a $34 million overstatement of oil and gas properties and an understatement of other property and equipment reported on the Alta Mesa Resources, Inc. and Alta Mesa Holdings, LP first and second quarter financial statements and property and equipment footnote. In addition, the delayed reclassification resulted in an overstatement of depletion expense for the first and second quarters.

  Management investigated the issue and determined all costs associated with salt water disposal wells within work-in-progress were appropriately identified and reclassified to property, plant and equipment during the first quarter and subsequent costs associated with completed salt water disposal wells were reclassified from work-in-progress to other property and equipment. In addition, management reviewed the detail of the entire amount of "water system" costs remaining within oil and gas properties as of the 3rd quarter and determined the total potential magnitude of the deficiency was $34 million.

While $34 million exceeds the Company's materiality threshold, the misstatement is a balance sheet classification issue and does not have a significant impact total property and equipment presented on the AMR or AMH balance sheets for the first or second quarter. Management evaluated the impact on depletion expense for the first and second quarters and noted depletion expense was overstated by approximately $750,000 and $850,000, respectively.

In addition we noted the error did not negatively impact or result in non-compliance with the Company's debt covenants (i.e. current ratio, leverage ratios) and/or have an impact on the EBITDA or EBITDAX or working capital which are the primary performance indicators used by investors to assess E&P company performance.

Based on the qualitative and quantitative misstatements identified above, management has determined the potential magnitude of the deficiency is not material to the financial statements.

Management evaluated whether the deficiencies individually and in aggregate are associated with the indicators of material weakness in internal control over financial reporting as outlined in AS 2001.69. Considerations included:

- ***Identification of fraud, whether or not material on the part of senior management:*** Fraud was not identified at any level of management related to these deficiencies.

- ***Restatement of previously issues financial statements to reflect the correction of a material misstatement:*** None of the deficiencies individually or in aggregate resulted in a misstatement that required previously issued financial statements to be restated.

- ***Identification by the auditor of a material misstatement of the financial statements in the current period in circumstances that indicate the misstatement would not have been detected by the company's internal control over financial reporting:*** None of the deficiencies individually or in aggregate resulted in a material misstatement of the current period financial statements.

- ***Ineffective oversight of the company's financial reporting and internal control by the company's audit committee:*** Management evaluated the nature and root cause of the deficiencies and concluded there is not an indication of ineffective oversight of the company's financial reporting and internal control by the company's audit committee.

Step 5: Identify relevant compensating controls and conclude on the severity

Management has established various transaction and application level controls designed to prevent or detect material misstatements related to various oil and gas property related transactions:

- ARO-03: ARO Rollforward
- ARO-04: ARO Additions Review
- ARO-05: Accretion Expense Review
- ARO-06: P&A Review
- ARO-07: ARO Inflation Rate Review
- ARO-09: Assent 143 PV Calculation (Application)
- DDA-03: Quarterly Depletion True-up Review
- GAC-03: Manual Journal Entry Review
- OGP-01: Oil and Gas Property Rollforward
- ACQ-03: Review of Acquisition Valuation & Purchase Price Allocation
- FCR-01: Disclosure Controls

Management has identified multiple compensating controls that mitigate the risk of material misstatement related to the deficiencies identified. Management believes these compensating controls are operating at a level of precision and are adequately designed to prevent or detect a material error in financial reporting. In addition, management has evaluated the operating effectiveness of these compensating controls and determined them to be operating effectively.

Based on the qualitative and quantitative assessment and consideration of the compensating controls in place and operating effectively, management does not believe any of the individual control deficiencies identified rise to the level or a material misstatement or significant deficiency.

Step 6: Aggregate similar deficiencies and evaluate the aggregated deficiencies for severity.

While management has concluded the deficiencies identified individually or in aggregate do not rise to the level of a material weakness, management considers the aggregation of the individual property accounting deficiencies to be of sufficient magnitude the Audit Committee would want to be informed of the matter. Therefore, the aggregation of the property accounting deficiencies is considered a significant deficiency.